

WEST Search History

DATE: Thursday, June 27, 2002

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
			result set
	<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>		
L3	mortierella alpina and (desaturase or oxidoreductase or oxidoreductase or oxidase)	30	L3
	<i>DB=USPT; PLUR=YES; OP=ADJ</i>		
L2	mortierella alpina and (desaturase or oxidoreductase or oxidoreductase or oxidase)	24	L2
	<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>		
L1	mortierella alpina and (desaturase or oxidoreductase or oxidase)	27	L1

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Search Results - Record(s) 1 through 10 of 30 returned.

1. Document ID: US 20010021522 A1

L3: Entry 1 of 30

File: PGPB

Sep 13, 2001

PGPUB-DOCUMENT-NUMBER: 20010021522
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010021522 A1

TITLE: Process for production of dihomo-gamma-linolenic acid and lipid containing same

PUBLICATION-DATE: September 13, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kawashima, Hiroshi	Osaka		JP	
Akimoto, Kengo	Osaka		JP	
Yamada, Hideaki	Kyoto-shi		JP	
Shimizu, Sakayu	Kyoto-shi		JP	

US-CL-CURRENT: [435/134](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC
Draw. Desc.	Image										

2. Document ID: US 6410288 B1

L3: Entry 2 of 30

File: USPT

Jun 25, 2002

US-PAT-NO: 6410288
DOCUMENT-IDENTIFIER: US 6410288 B1

TITLE: Methods and compositions for synthesis of long chain poly-unsaturated fatty acids

DATE-ISSUED: June 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Knutzon; Deborah	Granite Bay	CA		
Mukerji; Pradip	Gahanna	OH		
Huang; Yung-Sheng	Upper Arlington	OH		
Thurmond; Jennifer	Columbus	OH		
Chaudhary; Sunita	Westerville	OH		

US-CL-CURRENT: [435/189](#); [536/23.2](#)

ABSTRACT:

The present invention relates to fatty acid desaturases able to catalyze the conversion

of oleic acid to linoleic acid, linoleic acid to gamma-linolenic acid, or of alpha-linolenic acid to stearidonic acid. Nucleic acid sequences encoding desaturases, nucleic acid sequences which hybridize thereto, DNA constructs comprising a desaturase gene, and recombinant host microorganism or animal expressing increased levels of a desaturase are described. Methods for desaturating a fatty acid and for producing a desaturated fatty acid by expressing increased levels of a desaturase are disclosed. Fatty acids, and oils containing them, which have been desaturated by a desaturase produced by recombinant host microorganisms or animals are provided. Pharmaceutical compositions, infant formulas or dietary supplements containing fatty acids which have been desaturated by a desaturase produced by a recombinant host microorganism or animal also are described.

20 Claims, 19 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 16

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC
Draw Desc	Image										

3. Document ID: US 6403349 B1

L3: Entry 3 of 30

File: USPT

Jun 11, 2002

US-PAT-NO: 6403349

DOCUMENT-IDENTIFIER: US 6403349 B1

TITLE: Elongase gene and uses thereof

DATE-ISSUED: June 11, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mukerji; Pradip	Gahanna	OH		
Leonard; Amanda Eun-Yeong	Gahanna	OH		
Huang; Yung-Sheng	Upper Arlington	OH		
Thurmond; Jennifer	Columbus	OH		
Kirchner; Stephen J.	Westerville	OH		

US-CL-CURRENT: [435/183](#); [435/252.3](#), [435/254.1](#), [435/320.1](#), [435/325](#), [536/23.1](#), [536/23.2](#)

ABSTRACT:

The subject invention relates to the identification of a gene involved in the elongation of polyunsaturated fatty acids (i.e., "elongase") and to uses thereof. In particular, elongase is utilized in the conversion of gamma linolenic acid (GLA) to dihomogamma linolenic acid (DGLA) and in the conversion of 20:4n-3 to eicosapentaenoic acid (EPA). DGLA may be utilized in the production of polyunsaturated fatty acids, such as arachidonic acid (AA) which may be added to pharmaceutical compositions, nutritional compositions, animal feeds, as well as other products such as cosmetics.

20 Claims, 27 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 26

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC
Draw Desc	Image										

4. Document ID: US 6287829 B1

L3: Entry 4 of 30

File: USPT

Sep 11, 2001

US-PAT-NO: 6287829

DOCUMENT-IDENTIFIER: US 6287829 B1

TITLE: Process for the selective enzymatic hydroxylation of aldehydes and ketones

DATE-ISSUED: September 11, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stutz de Raadt; Anna	Graz			ATX
Kopper; Irene	Innsbruck			ATX
Griengl; Herfried	Graz			ATX
Klingler; Markus	Markt Hartmannsdorf			ATX
Braunegg; Gerhart	Graz			ATX

US-CL-CURRENT: 435/155; 435/147, 435/148, 435/832, 568/343, 568/376, 568/379, 568/420,
568/626

ABSTRACT:

A process for the selective enzymatic hydroxylation of aldehydes and ketones using chiral anchor-protective groups.

7 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	EDOC
Draw. Desc	Image									

 5. Document ID: US 6280982 B1

L3: Entry 5 of 30

File: USPT

Aug 28, 2001

US-PAT-NO: 6280982

DOCUMENT-IDENTIFIER: US 6280982 B1

TITLE: Process for production of dihomo-.gamma.-linolenic acid and lipid containing same

DATE-ISSUED: August 28, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kawashima; Hiroshi	Ibaraki			JPX
Akimoto; Kengo	Ibaraki			JPX
Yamada; Hideaki	Kyoto			JPX
Shimizu; Sakayu	Kyoto			JPX

US-CL-CURRENT: 435/134; 435/136, 435/187

ABSTRACT:

A process for the production of dihomo-.gamma.-linolenic acid comprising the steps of culturing a microorganism having an ability to produce arachidonic acid and having a reduced or lost .DELTA.5 desaturase activity to produce dihomo-.gamma.-linolenic acid or a lipid containing dihomo-.gamma.-linolenic acid, and recovering the dihomo-.gamma.-linolenic acid.

28 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

6. Document ID: US 6150144 A

L3: Entry 6 of 30

File: USPT

Nov 21, 2000

US-PAT-NO: 6150144

DOCUMENT-IDENTIFIER: US 6150144 A

TITLE: Process for producing omega-9 highly unsaturated fatty acid and lipid containing the same

DATE-ISSUED: November 21, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Akimoto; Kengo	Osaka			JPX
Kawashima; Hiroshi	Takatsuki			JPX
Shimizu; Sakayu	Kyoto			JPX

US-CL-CURRENT: 435/134

ABSTRACT:

The present invention discloses a process for producing lipid containing omega-9 highly unsaturated fatty acid by culturing in a medium a mutant strain obtained by mutation on a microorganism having the ability to produce arachidonic acid belonging to the genus *Mortierella* and so forth, in which .DELTA.12 desaturation activity is decreased or lost, but at least one of .DELTA.5 desaturation activity, .DELTA.6 desaturation activity and chain length elongation activity is elevated. Moreover, the present invention also discloses a process for producing omega-9 highly unsaturated fatty acid by collecting omega-9 highly unsaturated fatty acid from the culture or lipid described above.

13 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

7. Document ID: US 6136574 A

L3: Entry 7 of 30

File: USPT

Oct 24, 2000

US-PAT-NO: 6136574

DOCUMENT-IDENTIFIER: US 6136574 A

TITLE: Methods and compositions for synthesis of long chain polyunsaturated fatty acids

DATE-ISSUED: October 24, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Knutzon; Deborah	Granite Bay	CA		
Mukerji; Pradip	Gahanna	OH		
Huang; Yung-Sheng	Upper Arlington	OH		
Thurmond; Jennifer	Columbus	OH		
Chaudhary; Sunita	Pearland	TX		

US-CL-CURRENT: 435/134; 435/136

ABSTRACT:

The present invention relates to fatty acid desaturases able to catalyze the conversion of oleic acid to linoleic acid, linoleic acid to gamma-linolenic acid, or of alpha-linolenic acid to stearidonic acid. Nucleic acid sequences encoding desaturases, nucleic acid sequences which hybridize thereto, DNA constructs comprising a desaturase gene, and recombinant host microorganism or animal expressing increased levels of a desaturase are described. Methods for desaturating a fatty acid and for producing a desaturated fatty acid by expressing increased levels of a desaturase are disclosed. Fatty acids, and oils containing them, which have been desaturated by a desaturase produced by recombinant host microorganisms or animals are provided. Pharmaceutical compositions, infant formulas or dietary supplements containing fatty acids which have been desaturated by a desaturase produced by a recombinant host microorganism or animal also are described.

22 Claims, 18 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 16

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC

□ 8. Document ID: US H001893 H

L3: Entry 8 of 30

File: USPT

Oct 3, 2000

US-PAT-NO: H001893

DOCUMENT-IDENTIFIER: US H001893 H

TITLE: Enzymatic reduction method for the preparation of halohydrins

DATE-ISSUED: October 3, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Patel; Ramesh N.	Bridgewater	NJ		
Szarka; Laszlo J.	East Brunswick	NJ		
Banerjee; Amit	Yardley	PA		
McNamee; Clyde G.	Lawrenceville	NJ		

US-CL-CURRENT: 435/129; 435/280, 435/822

ABSTRACT:

An enzymatic reduction method, particularly a stereoselective enzymatic reduction method, for the preparation of halohydrins from halo ketones. The halohydrin products are particularly useful in the preparation of epoxides, which may be employed as intermediates in the preparation of protease inhibitors such as retroviral protease inhibitors.

1 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMPC	
Drawn Desc	Image										

9. Document ID: US 6075183 A

L3: Entry 9 of 30

File: USPT

Jun 13, 2000

US-PAT-NO: 6075183

DOCUMENT-IDENTIFIER: US 6075183 A

TITLE: Methods and compositions for synthesis of long chain poly-unsaturated fatty acids in plants

DATE-ISSUED: June 13, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Knutzon; Deborah	Granite Bay	CA		
Mukerji; Pradip	Gahanna	OH		
Huang; Yung-Sheng	Upper Arlington	OH		
Thurmond; Jennifer	Columbus	OH		
Chaudhary; Sunita	Pearland	TX		

US-CL-CURRENT: 800/281; 435/134, 435/252.3, 435/419, 435/430, 435/468, 435/471,
435/69.1, 536/23.2, 800/298

ABSTRACT:

The present invention relates to compositions and methods for preparing poly-unsaturated long chain fatty acids in plants, plant parts and plant cells, such as leaves, roots, fruits and seeds. Nucleic acid sequences and constructs encoding fatty acid desaturases, including .DELTA.5-desaturases, .DELTA.6-desaturases and .DELTA.12-desaturases, are used to generate transgenic plants, plant parts and cells which contain and express one or more transgenes encoding one or more desaturases. Expression of the desaturases with different substrate specificities in the plant system permit the large scale production of poly-unsaturated long chain fatty acids such as docosahexaenoic acid, eicosapentaenoic acid, .alpha.-linoleic acid, gamma-linolenic acid, arachidonic acid and the like for modification of the fatty acid profile of plants, plant parts and tissues. Manipulation of the fatty acid profiles allows for the production of commercial quantities of novel plant oils and products.

22 Claims, 7 Drawing figures

Exemplary Claim Number: 19

Number of Drawing Sheets: 17

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMPC	
Drawn Desc	Image										

10. Document ID: US 6051754 A

L3: Entry 10 of 30

File: USPT

Apr 18, 2000

US-PAT-NO: 6051754

DOCUMENT-IDENTIFIER: US 6051754 A

TITLE: Methods and compositions for synthesis of long chain poly-unsaturated fatty acids in plants

DATE-ISSUED: April 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Knutzon; Deborah	Granite Bay	CA		

US-CL-CURRENT: 800/281; 435/252.3, 435/419, 536/23.2

ABSTRACT:

The present invention relates to compositions and methods for preparing poly-unsaturated long chain fatty acids in plants, plant parts and plant cells, such as leaves, roots, fruits and seeds. Nucleic acid sequences and constructs encoding fatty acid desaturases, including .DELTA.5-desaturases, .DELTA.6-desaturases and .DELTA.12-desaturases, are used to generate transgenic plants, plant parts and cells which contain and express one or more transgenes encoding one or more desaturases. Expression of the desaturases with different substrate specificities in the plant system permit the large scale production of poly-unsaturated long chain fatty acids such as docosahexaenoic acid, eicosapentaenoic acid, .alpha.-linoleic acid, gamma-linolenic acid, arachidonic acid and the like for modification of the fatty acid profile of plants, plant parts and tissues. Manipulation of the fatty acid profiles allows for the production of commercial quantities of novel plant oils and products.

14 Claims, 8 Drawing figures

Exemplary Claim Number: 7

Number of Drawing Sheets: 21

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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Terms	Documents
mortierella alpina and (desaturase or oxidoreductase or oxidoreductase or oxidase)	30

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